

# PHASE II/V MONITORING WAIVER PACKET

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#### **Glossary**

IOCs – Inorganic Chemicals

**VOCs- Volatile Organic Chemicals** 

**SOCs- Synthetic Organic Chemicals** 

MCL-Maximum Contaminant Level

**GWS- Groundwater Systems** 

SWS- Surface Water System

GWUDI- Ground Water under Direct Influence of Surface Water System

CWS- Community Water System, a system that serves at least 15 service connections used by year-round residents or regularly serves 25 year-round residents.

NTNCWS-Non-Transient- Non-Community Water System, a system that serves at least the same 25 non-residential individuals during 6 months of the year.

TNCWS- Transient Non-Community Water System, a system that regularly serves at least 25 non-residential individuals (transient) during 60 or more days per year.

**R&C- Reliably and Consistently** 

Source- Ground water, Surface water or Ground Water under Direct Influence of Surface Water.

#### INSTRUCTIONS TO APPLY FOR A PHASE II/V WAIVER

#### Introduction

The Phase II/V Regulations became effective January 1, 1993. These regulations contain monitoring requirements and maximum contaminant levels for 13 inorganic chemicals (IOCs), 21 volatile organic chemicals (VOCs), 37 synthetic organic chemicals (SOCs) and numerous unregulated chemicals. Waivers are available to water systems to reduce or eliminate the number of samples a system must take while not jeopardizing public health. They are available for IOCs (excluding nitrate and arsenic), VOCs and SOCs.

If a water system does not apply for a waiver for a particular source, the source will have to be monitored at the frequency prescribed in the regulations for sources without waivers. The Oklahoma Department of Environmental Quality (ODEQ) will not ask for nor complete your waiver forms. The decision to apply for a waiver is completely the responsibility of each water system.

ODEQ has issued statewide waivers for butachlor, and dioxin; also, for any system that chlorinates, cyanide and nitrite. Some waivers will require that water systems submit copies of their previous chemical sampling. Systems are required by regulation to keep all chemical analyses for ten years.

The Phase II/V Regulations also provided a standard monitoring framework consisting of nine year compliance cycles made up of three, three year compliance periods. The first compliance cycle started in 1993 and ended in 2001. The current compliance cycle is made up of three compliance periods from 2011-2013, 2014-2016, and 2017-2019. The initial compliance period is defined as the compliance period running from 1993-1995 for existing water systems or the current compliance period when a system is classified as a public water system.

	9 year <u>compliance cycle</u>							
3 year <u>compliance period</u> 3 year <u>complia</u>			compliance	period	3 year	compliance	period	
2011	2012	2013	2014	2015	2016	2017	2018	2019

There are currently three different types of waivers: "Sampling Result Waiver", "Use Waiver" and "Continuance of Waiver". A "Sampling Result Waiver" is a waiver dependent on past sampling results that meet a certain criteria. A "Use Waiver" is a waiver dependent on known locations/use of contaminants and proximity to source. A "Continuance of Waiver" is the reapplication of waiver.

#### **Inorganic Chemicals (IOCs)**

IOCs are chemical substances of mineral origin. These include metals such as mercury, chromium, nitrate and arsenic. Currently, an IOC waiver may be obtained by "Sampling Result Waiver "or "Continuance of Waiver". There will be no waivers allowed for nitrate or arsenic. For systems that chlorinate, cyanide and nitrite will automatically be waived and no waiver application will be necessary. Asbestos testing may be waived if your system does not use asbestos cement pipe/transite pipe.

IOC waivers are effective for an entire <u>compliance cycle</u> (9 years). One sample must be collected during the waiver period and the waiver must be renewed every 9 years.

If a water system is new or gains a new source, initial routine sampling monitoring requirements will be mandatory. Initial routine sampling monitoring requirements are as follows. Groundwater systems sample once during initial 3 year <u>compliance period</u>. Surface water systems sample annually during initial 3 year <u>compliance period</u>. If a system has a sample above the MCL, increased monitoring would be mandatory. (Table 1.1)

To apply for a "Sampling Result Waiver" for IOCs, a ground water system must have one set of IOC sampling results for three consecutive <u>compliance periods</u> (Example: IOC sample taken once during 2011- 2013, once during 2014-2016, and once during 2017-2019). Surface water systems must have 3 consecutive annual samples (Example: IOC sample taken once during 2017, once during 2018 and once during 2019). Each sample result must be under the MCL.

Many systems are already on waiver schedules. If your system is on a 9 year IOC schedule, your system will need to renew the waiver by completing a "Continuance of Waiver" form.

In order to obtain an IOC waiver, systems must do one of the following:

- A.) Complete a "Sampling Result Waiver" form (Appendix A) if consecutive samples have been taken and were below the MCL or,
- B.) Complete a "Continuance of Waiver" form (Appendix B) if currently on a waiver schedule.

	Table 1.	1 IOC M	onitoring Requirements								
Monitoring type	System type	Source	Sampling frequency	Notes							
Initial Routine	All CWSs	GW	Once during initial 3 year compliance period.								
Sampling	& NTNCWs	SW	Annually during the initial 3 year compliance period.								
Reduced Sampling	All CWSs & NTNCWs	GW	Same as initial.								
	NTINCVVS	SW									
Donast Complian	All CWSs	GW	Once during subsequent 3 year compliance period.								
Repeat Sampling	& NTNCWs								SW	Annually during each subsequent 3 year compliance period.	
Increased Counting	All CWSs & NTNCWs	GW	Minimum of 2 quarters beginning next quarter to determine R&C <mcl.< td=""><td></td></mcl.<>								
Increased Sampling						SW	Minimum of 4 quarters beginning next quarter to determine R&C <mcl.< td=""><td></td></mcl.<>				
Waivers	All CWSs & NTNCWs	Any	SW systems must have monitored annually for 3 consecutive years and GW systems must have conducted 3 consecutive compliance periods without exceeding the MCL. Max waiver period is 9 years. One sample must be collected during the waiver period. Waivers must be renewed every 9 years.	Waivers must be issued in writing.							
Code of Fe	ederal Regula	tion (§141.	23(a)(1-3)); (§141.23(c)(1-4)) & (§141.23(c)(8	))							
	- 3	, -	1 /1 // (5 !== (=/(=)	,							

Т	Table 1.2	Nitrate :	Monitoring Require	ments
Monitoring type	System type	Source	Sampling frequency	Notes
	All CWS &	GW	Annual	
Initial Routine Sampling	NTNCWS	SW or GWUDI	Quarterly	
	TNCWS	Any	Annual	
Bodinged Coursellin	All CWS &	GW	Continue Annual	
Reduced Sampling	NTNCWS	SW or GWUDI	Annual	Results from 4 consecutive quarters must be < ½ MCL.
	TNCWS	Any	Continue Annual	
Increased Sampling ≥ than ½ the MCL	All CWSs & NTNCWs	GW SW or GWUDI	Must collect 4 consecutive quarterly samples following any one sample that is ≥ than ½ the MCL	May reduce to annual sampling if results from 4 consecutive quarters are < than ½ the MCL.
	TNCWS	Any	Continue Annual	
Increased Sampling	All CWSs &	GW	Compliance with the MCL is determined by averaging results of initial and confirmation samples.	Confirmation sample must be collected within 24 hours of the systems receipt of
	NTNCWs	SW or GWUDI		the analytical results of first sample.
	TNCWS	Any	Continue Annual	
Waivers			ndfathering and waivers not	
Code of	Federal Regu	lation (§141	1.23(d)(1-5)); (§141.23(i)(3)) &	& (§141.23(f)(2))

Table 1.3 Nitrite Monitoring Requirements							
Monitoring type	System type	Source	Sampling frequency	Notes			
Initial Routine Sampling	All	Any	All PWSs must take one sample in the first 3 year compliance period.				
Reduced Sampling	All	Any	After the initial sample, systems where result is < ½ the MCL shall monitor once per nine year.				
Increased Sampling  > ½ MCL	All	Any	Must collect 4 consecutive quarterly samples following any one sample that is $\geq \frac{1}{2}$ MCL	State may allow a system to reduce to annual sampling after determining the system is R&C below the MCL.			
Increased Sampling  >MCL	All	Any	Compliance with the MCL is determined by averaging results of initial and confirmation samples.	Confirmation sample must be collected within 24 hours of the systems receipt of the analytical results of first sample.			
Waivers	All	Any	Waived for any systems that chlorinate.	Waivers must be issued in writing.			
Code of	Federal Regu	lation (§14:	1.23(e)(1-3)); (§141.23(i)(3)) 8	& (§141.23(f)(2))			

		Table 1.4 IOC MCL		
SDWIS	Chemical Name	Notes	N	/ICL
Code	Chemical Name	Notes	mg/L	μg/L
1074	Antimony		0.006	6
1010	Barium		2	2000
1075	Beryllium		0.004	4
1015	Cadmium		0.005	5
1020	Chromium		0.1	100
1025	Fluoride		4	4000
1035	Mercury		0.002	2
1045	Selenium		0.05	50
1085	Thallium		0.002	2
1005	Arsenic	Cannot be waived	0.01	10
1024	Cyanide	Waived for systems that chlorinate	0.2	200
1094	Asbestos	Waived for systems without asbestos pipe	7	7000
1040	Nitrate	Cannot be waived	10	10000
1038	Nitrate/Nitrite	Cannot be waived	10	10000
1041	Nitrite	Waived for systems that chlorinate	1	1000

#### **Volatile Organic Chemicals (VOCs)**

Many VOCs are chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are compounds of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents. Currently, a VOC waiver may be obtained by "Sampling Result Waiver" or "Continuance of Waiver".

VOC waivers for ground water entry points are effective for the current <u>compliance period</u> as well as the following <u>compliance period</u> (effective 6 years). VOC waivers for surface water entry points are effective for only the current <u>compliance period</u> (effective 3 years). Since VOCs are done by a single analytical method in the lab, the VOC waiver will be an "all or none" situation.

If a contaminant listed in Table2.2 is detected at a level exceeding 0.0005 mg/l in any sample, then the system must monitor quarterly at each sampling point which resulted in detection. If a system is new or gains a new source, initial monitoring requirements of four (4) consecutive quarterly samples will be mandatory until the sampling point proves to be reliably and consistently below the MCL. (Table 2.1)

If a system has "no detects" in the four quarterly samples they may be reduced to an annual sample. After three annual samples with "no detects" a system may then apply for a "Sampling Result Waiver".

Many systems are already on waiver schedules. If your system is a SW and has a 3 year VOCN schedule, or if your system is a GW system on a 6 year VOCN schedule, your system will need to renew the waiver by completing a "Continuance of Waiver" form.

In order to obtain a VOC waiver, systems must do one of the following:

- A.) Complete a "Sampling Result Waiver" form (Appendix A) if three annual samples have been taken with "no detects" or,
- B.) Complete a "Continuance of Waiver" form (Appendix B) if currently on a waiver schedule.

	Table	e 2.1 VO	C Moni	toring Requirements	
Monitoring type	System type	Source	Pop.	Sampling frequency	Notes
Initial Routine Sampling	All CWSs & NTNCWs	Any	Any	Four consecutive quarterly samples during initial compliance period.	
	All CWSs	Ground water	Any	May be reduced to 1 sample annually.  After 3 annual with no detects, system may collect 1 sample per compliance period.	May be reduced ONLY if the state
Reduced monitoring	& NTNCWs	Surface water	Any	May be reduced to 1 sample annually.	determines that sampling results fall R&C below the MCL.
Increased monitoring (If exceed detection limit or MCL)	All CWSs & NTNCWs	Any	Any	Must collect 1 sample per quarter until state determines sampling results are reliably and consistently (R&C) below MCL	
Reduced Monitoring (once state determines system is R&C below MCL)	All CWSs & NTNCWs	Any	Any	State may reduce sampling frequency to 1 sample annually.	May be reduced ONLY if the state determines that sampling results fall R&C below the MCL.
Waivers	All CWSs & NTNCWs	Any	Any	System may be granted waiver if contaminant is not detected in 3 annual samples. Max waiver period for GW=6 years and SW =3 years.	Waivers must be issued in writing.
		Code of	Federal Re	egulation (§141.24(f)	

		Table 2.2 VOC MCL		
SDWIS	Ob and all Name		N	ICL
Code	Chemical Name	Alternate Name	mg/L	μg/L
2981	1,1,1-Trichloroethane		0.2	200
2985	1,1,2-Trichloroethane		0.005	5
2378	1,2,4- Trichlorobenzene		0.07	70
2980	1,2-Dichloroethane		0.005	5
2983	1,2-Dichloropropane		0.005	5
2990	Benzene		0.005	5
2982	Carbon Tetrachloride	Tetrachloromethane	0.005	5
2989	Monochlorobenzene	Chlorobenzene	0.1	100
2380	cis-1,2-dichloroethylene		0.07	70
2977	1,1,-Dichloroethylene	Dichloroethene; 1,1,-DCE	0.007	7
2964	Dichloromethane	Methylene Chloride	0.005	5
2992	Ethylbenzene		0.7	700
2968	o-Dichlorobenzene	1,2-Dichlorobenzene	0.6	600
2969	1,4-Dichlorobenzene	para-Dichlorobenzene	0.075	75
2996	Styrene		0.1	100
2987	Tetrachloroethylene		0.005	5
2991	Toluene		1	1,000
2955	Total Xylenes		10	10,000
2979	Trans-1,2-dichloroethylene		0.1	100
2984	Trichloroethylene	Trichloroethene	0.005	5
2976	Vinyl Chloride		0.002	2

#### **Synthetic Organic Chemicals (SOCs)**

SOCs are manmade compounds commonly used in herbicides and pesticides. Currently, a SOC waiver may be obtained by "Sampling Result Waiver" or "Use Waiver".

If any contaminant listed in Table 3.4 is detected at any level in any sample, then the system must monitor quarterly at each sampling point which resulted in detection. If a system is new or gains a new source, initial monitoring requirements of 4 consecutive quarterly samples will be mandatory. (Table 3.1)

If a system has "no detects" in the four quarterly samples they may be reduced to one sample per <u>compliance period</u> if population is less than or equal to 3,300. If population is greater than 3,300 systems may be reduced to 2 samples per <u>compliance period</u>. After three consecutive samples with "no detects" a system may then apply for a "Sampling Results Waiver".

Systems granted SOC waivers are not required to monitor. Waivers once granted, will need to be renewed every three years. Systems may do so by completing the "Continuance of Waiver" form.

Table 3.2 and Table 3.3 list the trade names that SOCs are marketed under.

In order to obtain a SOC waiver, systems must do one of the following:

- A.) Complete a "Sampling Result Waiver" form (Appendix A) if three consecutive samples have been taken with "no detects" or,
- B.) Complete a "Use Waiver" form (Appendix C).
- C.) Complete a "Continuance of Waiver" form (Appendix B) if currently on a waiver schedule.

	Tabl	e 3.1 SO	C Moni	toring Requirements	
Monitoring type	System type	Source	Рор.	Sampling frequency	Notes
Initial Routine Sampling	All CWSs & NTNCWs	Any	Any	Four consecutive quarterly samples during initial compliance period.	Sampling required unless waiver is granted.
Reduced monitoring	All CWSs &	Any	<u>&lt;</u> 3,300	May be reduced to 1 sample during each consecutive compliance period.	May be reduced ONLY if system had no detects in
	NTNCWs		>3,300	May be reduced to two quarterly samples in 1 year during each consecutive compliance period.	the initial round of routine sampling.
Increased monitoring (If exceed detection limit or MCL)	All CWSs & NTNCWs	Any	Any	Must collect 1 sample per quarter until state determines sampling results are reliably and consistently (R&C) below MCL. Systems must take at least 4 quarterly samples.	
Reduced Monitoring (once state determines system is R&C below MCL)	All CWSs & NTNCWs	Any	Any	State may reduce sampling frequency to 1 sample annually, taken during the same quarter which previously yielded the highest analytical result.	May be reduced ONLY if the state determines that sampling results fall R&C below the MCL.
Waivers	All CWSs & NTNCWs	Any	Any	Systems granted waivers are not required to monitor. System may be granted waiver if contaminant is not detected in 3 consecutive annual samples. Systems also eligible for use waiver. Waivers must be renewed every 3 years.	Waivers must be issued in writing.

000 0111-1	Table 3.2 Regulated SOC Contaminants and Trade Names
SOC Chemical Name	Alternative/Trade name
2,4,5-tp (Silvex)	Weed-B-Gon; Propon; Silvi-Rhap; Sta-fast; Miller; Nu Set; Aqua-Vex; Color-Set; Ded-Weed; Fenoprop; Fenormone; Fruitone; T Garlon; Kuran; Kurosal G/SL Silvex
2,4-D	"Agent White"; Bladex-B; Brush Killer 64; Dicofur; Dormon; Ipaner; Moxon; Netagrone; Pielik; Verton 38; Mota; Maskros; Silvaprop 1; Agricom D; Acme LV4; Croprider; Fernesta; Lawn-Keep; Pennamine D; Plantgard; Tributon; Weed-B-Gon; Weedatul; Agroxone; Weedar; Salvo; Green Cross Weed-No-More 80; Red Devil Dry Weed Killer; Scott's 4XD; Weed-Rhap LV40; Weedone 100; 2,4-Dichloro-phenoxyacetic acid; Crossbow; Campaign; Turfester; Dissolve; Encore; LAF; Landmaster; Millennium Ultra; Sabre; Trupower Selective; Trimec; Weedmaster
Alachlor	Alochlor; Lasagrin; Lassagrin; Lasso; Lazo; Metachlor; Pillarzo; Alanox; Alanex; Chimichlor
Atrazine	Aatrex; Actinite PK; Akticon; Argezin; Atazinax; Atranex; Atrata; Atred; Candex; Cekuzina-T; Chromozin; Crisatrina; Cyazin; Fenamin; Fenatrol; Gesaprim; Griffex; Hungazin; Inakor; Pitezin; Primatol; Radazin; Strazine; Vectal; Weedex A; Wonuk; Zeapos; Zeazine; Marksman; Bicep; Expert; Laddok; Lariet; Moxy; ReadyMaster ATZ; Shotgun
Benzo(a)pyrene	BaP; 3;4-Benz(a)pyrene
Bis(2-ethylhexyl)adipate	Adipic acid; bis(2-ethylhexyl) ester; Bis(2-ethylhexyl) hexanedioate; BEHA; DEHA; Adipol 2EH; Bisoflex DOA; Dioctyl adipate; Effomoll DOA; Flexol A26; Kodflex DOA; Monoplex DOA; Octyl adipate; Plastomoll DOA; Sicol 250; Truflex DOA; Vestinol OA; Wickenol 158; Witamol 320; Ergoplast AdDO; Kemester 5652; Reomol DOA; Rucoflex plasticizer DOA; Staflex DOA. Adipate; (2diethylhexyl)
Bis(2-ethylhexyl)phthalate	DEHP; Bis(2-ethylhexyl)-phthalate; BEHP; Dioctyl phthalate; Pittsburgh PX 138; Platinol AH; RC Plasticizer DOP; Reomol D79P Sicol 150; Staflex DOP; Truflex DOP; Vestinol AH; Vinicizer 80; Palatinol AH; Hercoflex 260; Kodaflex DOP; Mollan O; Nuoplaz DOP; Octoil; Eviplast 80; Fleximel; Flexol DOP; Good-rite GP264; Hatcol DOP; Ergoplast FDO; DAF 68; Bisoflex 81
Carbofuran	Niagara 10242; Furadan 4F or 3G; Brifur; Crisfuran; Chinufur; Curaterr; Yaltox; Pillarfuran; Kenofuran
Chlordane	Velsicol 1068; Aspon-chlordane; Belt; Chlorindan; Chlor-Kil; Cortilan-Neu; Dowchlor; Oktachlor; Oktaterr; Synklor; Tat Chlor 4;
Officialic	Topiclor; Toxichlor; Intox 8; Gold Crest C-100; Kilex; Kypchlor; Niran; Termi-Ded; Prentox; Pentiklor
Dalapon	2,2-dichloro-proprionic acid; 2,2-DPA; Revenge; Alatex; Basfapon; Basinex; Crisapon; Dawpon-RAE; Ded-Weed; Dowpon; Gramevin; Kenapon; Liropon; Propon; Radapon; Unipon; S-1315; S-95
Dibromochloropropane	DBCP; BBC 12; Fumagon; Fumazone; Nemabrom; Nemafum; Nemagon; Nemanax; Nemapaz; Nemaset; Nemazon; Gro-Tone Nematode; Durham Nematocide EM 17.1
Dinoseb	Aatox; Chemox; Gebutox; Knox-weed; Basanite; BNP 20; Butaphene; Dibutox; Dinitrall; Dinitro; Desicoil; Dow Selective Weed Killer; Hivertox; Ladob; Laseb; Nitropone C; Dytop; Premerge; Hel-fire; Caldon; Kiloseb; Sinox General; Subitex; Dinitrobutyl-phenol
Diquat	1,1-Ethylene 2,2-dipyridylium dibromide; Reglone; Reward
Endothall	Hexahydro-3,6-endo-epoxy-1,2-benzenedicarboxylic acid; Accelerate; Aquathol; Des-i-cate; Endothall Turf Herbicide; Endothall Weed Killer; Herbicide 273; Hydrothol; Herbon Pennout; Hydout
Endrin	Nendrin; EN 57; Endrex; Endricol; Hexadrin; Mendrin; Oktanex; Compound 269
Ethylene Dibromide	1,2-Dibromoethane; EDB; Glycol dibromide; Bromofume; Dowfume W 85; Aadibroom; Iscobrome-D; Nefis; Pestmaster; EDB-85 Soilbrom; Soilfume; Kopfume
Glyphosate	N-(phosphonomethyl) glycine; Glialka; Roundup; Sting; Rodeo; Spasor; Muster; Tumbleweed; Sonic; Glifonox; Glycel; Rondo; Fallowmaster; Accord; Aquamaster; Backdraft; Glpro; Glystar; Honcho; Prosecutor; Razor; RT Master; Sequence
Heptachlor	3-Chlorochlordene; Aahepta; Agroceres; Hepta; Heptachlordane; Heptagran; Heptamul; Heptox; Gold Crest H-60; Rhodiachlor; Velsicol 104; Basaklor; Soleptax; Termide
Heptachlor Epoxide	3-Chlorochlordene; Aahepta; Agroceres; Hepta; Heptachlordane; Heptagran; Heptamul; Heptox; Gold Crest H-60; Rhodiachlor; Velsicol 104; Basaklor; Soleptax; Termide
Hexachlorobenzene	Hexa CB; HCB; Phenyl perchloryl; Perchlorobenzene; Pentachlorophenyl chloride; Anticarie; Bunt-cure; Co-op hexa; Julin's carbon chloride; No bunt 40; No bunt 80; Sanocide; Snieciotox; Smut-go; Granox nm; Voronit C
Hexachlorocyclopentadiene	HEX; Hexachloropentadiene
Lindane	Benzene hexachloride-gamma; gamma-Hexachlorocyclohexane; Exagamma; Forlin; Gallogamma; Gammaphex; Inexit; Kwell; Lindagranox; Lindaterra; Lovigram; Silvanol
Methoxychlor	2,2-bis(p-methoxyphenyl)-1,1,1-trichloroethane; dianisyl trichloroethane; Dimethoxy-DDT; Methoxy-DDT; Chemform; Maralate; Methoxo; Methoxcide; Metox; Moxie
Oxamyl	Vydate K; Thioxamyl; Dioxamyl; DPX 1410; Dupont 1410
Polychlorinated Biphenyls(PCB)&Arochlor	Most commonly sold as Arochlor.
Pentachlorophenol	PCP; Penchlorol; Dowicide 7; Permasan; Fungifen; Grundier arbezol; Lauxtol; Liroprem; Chlon; Dura Treet II; Santophen 20; Woodtreat; Penta Ready; Penta WR; Forpen-50; Ontrack WE Herbicide; Ortho Triox; Osmose WPC; Watershed WP; Weed and Brush Killer
Picloram	4-amino-3,5,6-trichloropicolinic acid; "Agent White"; Tordon
Simazine	Aktinit; Batazina; Bitemol; CAT(Herbicide); CDT; Cekuzina-S; Geigy 27;692; Gesatop; Herbazin; Herbex; Hungazin; Premazine; Primatol S; Pricep; Printop; Radocon; Simadex; Tafazine; Zeapur; 2-chloro-4,6-bis(ethylamino)-1,3,5-Triazine
Toxaphene	Chlorinated camphene; Octachlorocamphene; Camphochlor; Agricide Maggot Killer; Alltex; Crestoxo; Compound 3956; Estonox Fasco-Terpene; Geniphene; Hercules 3956; M5055; Melipax; Motox; Penphene; Phenacide; Phenatox; Strobane-T; Toxadust; Toxakil; Vertac 90%; Toxon 63; Attac; Anatox; Royal Brand Bean Tox 82; Cotton Tox MP82; Security Tox-Sol-6; Security Tox-MP cotton spray; Security Motox 63 cotton spray; Agro-Chem Brand Torbidan 28; Dr Roger's TOX-ENE

SDWIS	Chaminal Nama	Altamata Nama	MC	L
Code	Chemical Name	Alternate Name	mg/L	μg/L
2110	2,4,5-tp (Silvex)		0.05	50
2105	2,4-D		0.07	70
2051	Alachlor		0.002	2
2050	Atrazine		0.003	3
2306	Benzo(a)pyrene		0.0002	0.2
2035	Bis(2-ethylhexyl)adipate	Di(2-ethylhexyl)adipate; DEHA	0.4	400
2298	Bis(2-ethylhexyl)phthalate	Di(2-ethylhexyl)phthalate; DEHP; Di-secoctylphthalate	0.006	6
2046	Carbofuran	Furadan	0.04	40
2959	Chlordane	Gamma-Chlordane	0.002	2
2031	Dalapon		0.2	200
2931	Dibromochloropropane	1,2-dibromo-3-chloropropane; DBCP	0.0002	0.2
2041	Dinoseb		0.007	7
2032	Diquat		0.02	20
2033	Endothall		0.1	100
2005	Endrin		0.002	2
2946	Ethylene Dibromide	EDB; 1,2-Dibromethane	0.00005	0.05
2034	Glyphosate	Round-up	0.7	700
2065	Heptachlor		0.004	0.4
2067	Heptachlor Epoxide		0.002	0.2
2274	Hexachlorobenzene		0.001	1
2042	Hexachlorocyclopentadiene		0.05	50
2010	Lindane		0.0002	0.2
2015	Methoxychlor		0.04	40
2036	Oxamyl	Vydaye	0.2	200
2383	Polychlorinated Biphenyls(PCB)		0.0005	0.5
2326	Pentachlorophenol		0.001	1
2040	Picloram	Tordon	0.5	500
2037	Simazine		0.004	4
2020	Toxaphene		0.003	3

# Appendix A

### **Sampling Results Waiver**

PWSID Number:	PWS Name:
We request a waiver to co	ver the following entry point: (please make copies for multiple entry points) SF) ID:WSF Name:
Please check all that apply	and list sample dates.
IOC Waiver consecutive	ve sample dates
	oplying for an IOC waiver; does your system have asbestos cement or transite pipe in tem? Yes or No (circle)
VOC Waiver consecutive	ve sample dates
SOC Waiver	
	ver, please list contaminants to be considered for waiver along with consecutive sults must be at least "no detect".
Does your system have as	sbestos cement or transite pipe in your distribution system? Yes or No (circle)
	n is accurate at this time for our water system.  Title
Print name	
Address, City, State, Zip	
Phone number/Fax number	er/Email address
Signatura	Data
Signature	Date
	mie Henson, Oklahoma Department of Environmental Quality, Water Quality Oklahoma City, OK 73101-1677
	(Department Use)
Waiver approved for the fo	
Signature	Date

# Appendix B

#### **Continuance of Waiver**

PWSID Number:	PWS Name:
	the following entry point: (please make copies for multiple entry points)WSF Name:
We are applying for a continu	ance of VOC, SOC or IOC waiver. (Please circle all that apply)
If your system is applying your distribution system	ng for an IOC waiver; does your system have asbestos cement or transite pipe in ? Yes or No (circle)
We certify that during the tin changes in the construction of	ne of waiver no new sources were added to our PWS. We certify that no f the system occurred.
All of the above information is	accurate at this time for our water system.
	Title
Print name	
Address, City, State, Zip	
Phone number/Fax number/E	mail address
Signature	Date
Please return form to Jamie Division, P.O. BOX 1677, Okl	
	(Department Use)
Waiver approved for the follow	
Cignoture	
Signature	Date

## **Appendix C**

#### **SOC Use Waiver**

(Complete for every source)
PWS Name:

PWSID Number:	PWS Name:	
	Water System Facility Name:_	
	eatures that may have affected source v	
· · · · · · · · · · · · · · · · · · ·	istance range from the referenced sour	
Feature	Less than ¼ mile	Comments
	Residential Features	
Garden		If any are noted, please
		complete and attach
		Ag/Chem usage form
Golf Course		(Appendix D).
Roadway		
	Agricultural Features	
Irrigated Cropland		If any are noted, please
Non-irrigated Cropland		complete and attach
Pasture		Ag/Chem usage form
Feedlot		(Appendix D).
(confined animals)		
Orchard/Nursery		
Forestland		
	Surface Water Features	
Irrigation canal		If any are noted, please
(Lined/unlined)		complete and attach
Drainage Ditch		Ag/Chem usage form (Appendix D).
All of the above information is accura	ate at this time for our water system.	
	Title	
Print name		
Address, City, State, Zip		<del></del>
•		
Phone number/Fax number/Email ac	ddress	
Signature	Nate	
olgilataro		
Please return form to Jamie Henson BOX 1677, Oklahoma City, OK 7310		•
	(Department Use)	
Waiver approved for the following ar		
Signature	Date	

### Appendix D

# **Ag/Chem Usage Form** (Complete for every source)

PWSID Number:	PWS Name:	
Water System Facility ID:		WSF Name:
Please indicate if any chemicals li ¼ mile of the source. Please refe Information source:		r are currently used in the last 25 years within 3.3 for trade names.
LandownerCount	ty Ext. Agent	Oklahoma Dept. of Ag.
County Sanatarian	Other (Specify	)
I	Shook hara if not used and you u	yould Chack hara if used and data of last

Chemical Name	Check here if not used and you would	Check here if used and date of last
0.45 (0.1 )	like to apply for a waiver	known use.
2,4,5-tp (Silvex)		
2,4-D		
Alachlor		
Atrazine		
Benzo(a)pyrene		
Bis(2-ethylhexyl)adipate		
Bis(2-ethylhexyl)phthalate		
Carbofuran		
Chlordane		
Dalapon		
Dibromochloropropane		
Dinoseb		
Diquat		
Endothall		
Endrin		
Ethylene Dibromide		
Glyphosate		
Heptachlor		
Heptachlor Epoxide		
Hexachlorobenzene		
Hexachlorocyclopentadiene		
Lindane		
Methoxychlor		
Oxamyl		
Polychlorinated Biphenyls(PCB)		
Pentachlorophenol		
Picloram		
Simazine		
Toxaphene		

#### **Commonly used SOC's**

#### Horticultural

<u>Alfalfa</u> –Carbaryl, Carbofuran, Dinoseb, Endothall, Methomyl, Methoxychlor, Metribuzin, Simazine

Asparagus - 2, 4-D, Dicamba, Metribuzin

**Barley**- Ethylene Dibromide, Metribuzin

Clover- Dinoseb, Endothall

<u>Corn</u>- 2, 4-D, Alachlor, Atrazine, Carbofuran, Dicamba, Endrin, Glyphosate, Heptachlor, Lindane, Metalochlor, Methomyl, Metribuzin, Picloram, Simazine, Toxaphene

<u>Cotton</u>- Alachlor, Aldicarb, Carbofuran, Dibromochloropropane, Endothall, Endrin, Glyphosate, Methomyl, Metolachlor, Oxamyl, Toxaphene

Forest - 2, 4 D, 2, 4, 5-TP, Carbaryl, Endrin, Lindane

<u>Fruit Trees/Berries</u> —Carbaryl, Dibromochloropropane, Dinoseb, Endrin, Glyphosate, Lindane, Metalochlor, Methomyl, Methoxychlor, Oxamyl, Simazine

<u>Grain Sorghum</u> - 2, 4-D, Alachlor, Aldicarb, Atrazine, Carbaryl, Carbofuran, Dicamba, Dinoseb, Glyphosate, Heptachlor, Lindane, Metolachlor, Methomyl

**Greenhouses**- Carbaryl, Lindane, Oxamyl

<u>Lawn/Turf grass</u> - 2, 4-D, Atrazine, Carbaryl, Glyphosate, Dalapon, Dibromochloropropane, Dicamba, Diquat, Endothall, Methomyl, Metribuzin, Simazine

<u>Melons</u> - 2, 4-D\_Alachlor\_Atrazine\_Carbaryl\_Chlordane\_Dalapon\_Dibromochloropropane\_Dinoseb\_Ethylene Dibromide\_Glyphosate\_Lindane\_Methomyl\_Methoxychlor\_Metolachlor\_Metribuzin\_Oxamyl\_Simazine

<u>Nuts</u> – Alachlor, Aldicarb, Carbaryl, Carbofuran, Dibromochloropropane, Dinoseb, Glyphosate, Lindane, Methomyl, Metolachlor, Oxamyl, Simazine

<u>Ornamentals/Nursery Stock</u> – Aldicarb, Atrazine, Carbaryl, Chlordane, Dibromochloropropane, Endrin, Glyphosate, Lindane, Methomyl, Methoxychlor, Metolachlor, Oxamyl, Simazine

<u>Pasture/Rangeland</u> - 2, 4-D, 2, 4, 5-TP, Atrazine, Carbaryl, Dicamba, MetribuzinPicloram

<u>Potatoes</u> – Alachlor, Carbofuran, Dinoseb, Diquat, Endothall, Metolachlor, Metribuzin

<u>Small Grains</u> - 2, 4-D, Carbofuran, Dicamba, Endrin, Ethylene Dibromide, Glyphosate, Heptachlor, Lindane, Methomyl, Picloram, Toxaphene

<u>Soybeans/Pod Crops</u> – Alachlor, Aldicarb, Carbaryl, Carbofuran, Dibromochloropropane, Dinoseb, Glyphosate, Methomyl, Metolachlor, Metribuzin, Oxamyl

Sweet Potatoes – Aldicarb, Glyphosate

<u>Vegetables</u> - 2, 4-D, Alachlor, Atrazine, Carbaryl, Chlordane, Dalapon, Dibromochloropropane, Dinoseb, Ethylene Dibromide, Glyphosate, Oxamyl, Lindane, Methoxychlor, Metolachlor, Metribuzin, Simazine

<u>Wheat</u> – Carbaryl, Carbofuran, Ethylene Dibromide, Glyphosate, Hexachlorobenzene, Lindane, Methomyl, Metribuzin

#### Livestock

<u>Dairy/Beef Cattle</u> – Lindane, Methomyl, Methoxychlor, Toxaphene

<u>Horses</u> – Lindane

Household Pets/Kennels - Carbaryl, Heptachlor, Lindane

<u>Poultry</u> – Carbaryl, Methomyl

<u>Sheep/Goats</u>- Lindane, Methoxychlor

<u>Swine</u>- Lindane, Methoxychlor

#### **Environment**

Aquatic Weeds - 2, 4-D, Diquat, Endothall, Glyphosate, Simazine

<u>Drainage Ditches</u>- 2, 4-D, Dalapon, Diquat, Endothall, Glyphosate, Simazine

Mosquito/Grasshopper Control- Dieldrin

Rights-of-Way - Atrazine, Dalapon, Dicamba, Glyphosate, Metolachlor, Picloram

Storage/Warehouse Fumigants - Ethylene Dibromide, Methoxychlor, Pentachlorophenol

<u>Structural/Household Pest Control</u> – Aldrin, Carbaryl, Chlordane, Dieldrin, Heptachlor, Lindane, Methoxychlor, Pentachlorophenol